

Work Order ID 83829
Thursday, April 26, 2012 1:08:03 PM

83829

Page 1

Item ID: D4463-041

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Tank Top Assembly

Start Date: 4/26/2012 Start Qty: 4.00

4

Cust Item ID:

Required Date: 5/3/2012 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan: MFE

Date: 12-04-28

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4463

C

100

0.00

100

FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg

Dwg Rev: E

Prog Rev: E

2-Deburr if necessary

6061 . 063

4

0

Jm / nm
12-5-3

110

0.00

110

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

4

0

Jm / nm
12-5-3

120

0.00

120

QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

8.765103

tu

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 83829***83829***

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Required Date: 5/3/2012 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

0.00

130

NC BRAKE

Small Fab

Memo

0.00

Small Fab

C'SINK HOLES AS PER DWG

2x

12/05/28

140

0.00

140

QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

8/10/28

2

150

0.00

150

Chemical Conversion Coat per QSI005 4.1

HandFinish

Memo

0.00

Hand Finishing

2

12-5-29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 4

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Revision ID:

Item Name: Tank Top Assembly

Stop ***NS2***

Start Date: 4/26/2012 Start Qty: 4.00

4

Cust Item ID:

Required Date: 5/3/2012 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

Identify as per dwg & Stock Location: WMA

0.00

190

Packaging

Memo

0.00

Packaging

2 0 12-08-22

200

QC21- Final Inspection - Work Order Release

0.00

200

QC

Memo

0.00

Quality Control

MLJ 12/08/23ME 12-08-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, April 26, 2012 1:08:02 PM

Page 1

Work Order ID: 83829

Parent Item: D4463-041

Parent Item Name: Tank Top Assembly

Start Date: 4/26/2012

Required Date: 5/3/2012

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A 12.03.08 NEW ISSUE DD VERF:EC
DWG REV.B DD VERF:EC

IPP REV:B 12.04.25 AS PER

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.063 6061-T6 .063 Sheet		Purchased	No			100	sf	286.8422	3.864	15.456			

Location Loc Qty Loc Code

MAT021 286.8422000
113608 0
116308 6.01556842
117285 67.544
119331 44.2
119802 20.94
120218 21
120866 127.142632

MS20426AD3-3
RIVET

Purchased

No

21578

170

Each

3,280.0000

48

192

Location Loc Qty Loc Code

ST316 3280
104374 614
110398 2666

NAS1473R3

Purchased

No

170

Each

84.0000

24

96

Location Loc Qty Loc Code

GA 60
121287 60
ST278 24
121236 24

Anchor Nut

121578 (15.4) JUN 11 12-5-3
12/08/22
M121011 (500)
12/08/22
M121615
(380)
M122141 (100)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

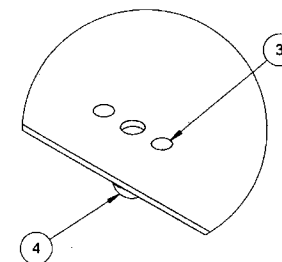
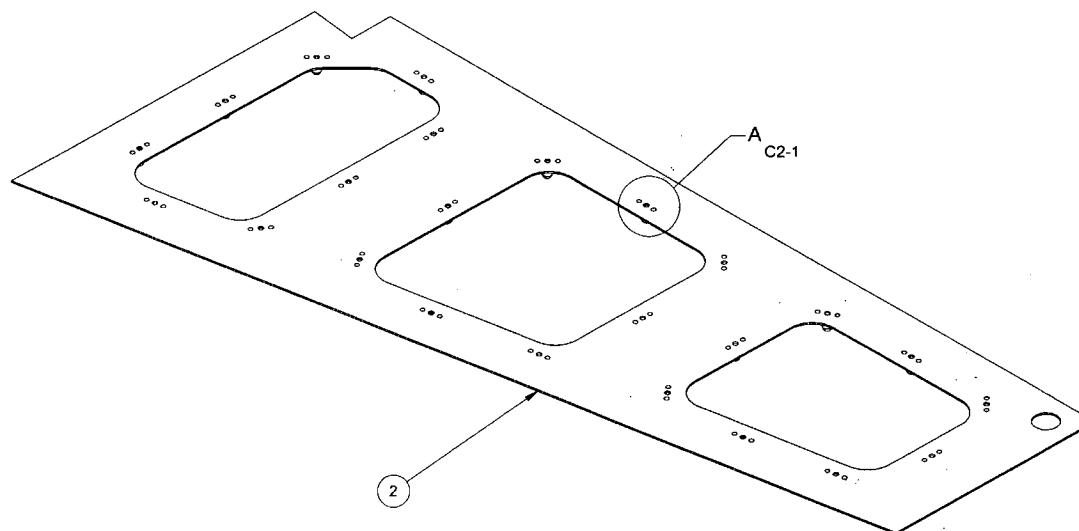
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	X	D4463-041	TANK TOP ASSEMBLY
2	1	D4463-1	TANK TOP
3	48	MS20426AD3-4	RIVET
4	24	NAS1473R3	ANCHOR NUT

83629



DETAIL A
C4-1

D4463-041 TANK TOP ASSEMBLY

RELEASE
N 2012-04-24

- NOTES:**
 1) MATERIAL: N/A
 2) FINISH: N/A
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: N/A
 7) WEIGHT: 1.76 lbs

C	ADD DIMS: ZN B5-5, D5-5, B2-11, B7-11, D3-11. ADD -13, MODIFY -1/-11.	DC	12.03.23
B	ADD D4463-041, ZN C5-1. UPDATED -1/-3/-5/-7/-9. COMBINED -11 & -13 INTO -11	DC	11.12.14
A	NEW ISSUE	DC	11.10.19
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D4463 REV. C SHEET 1 OF 14 TITLE TANK SCALE NTS COPYRIGHT © 2011 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	12.03.23		

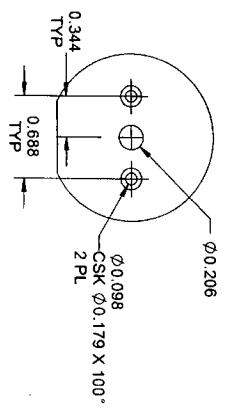
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

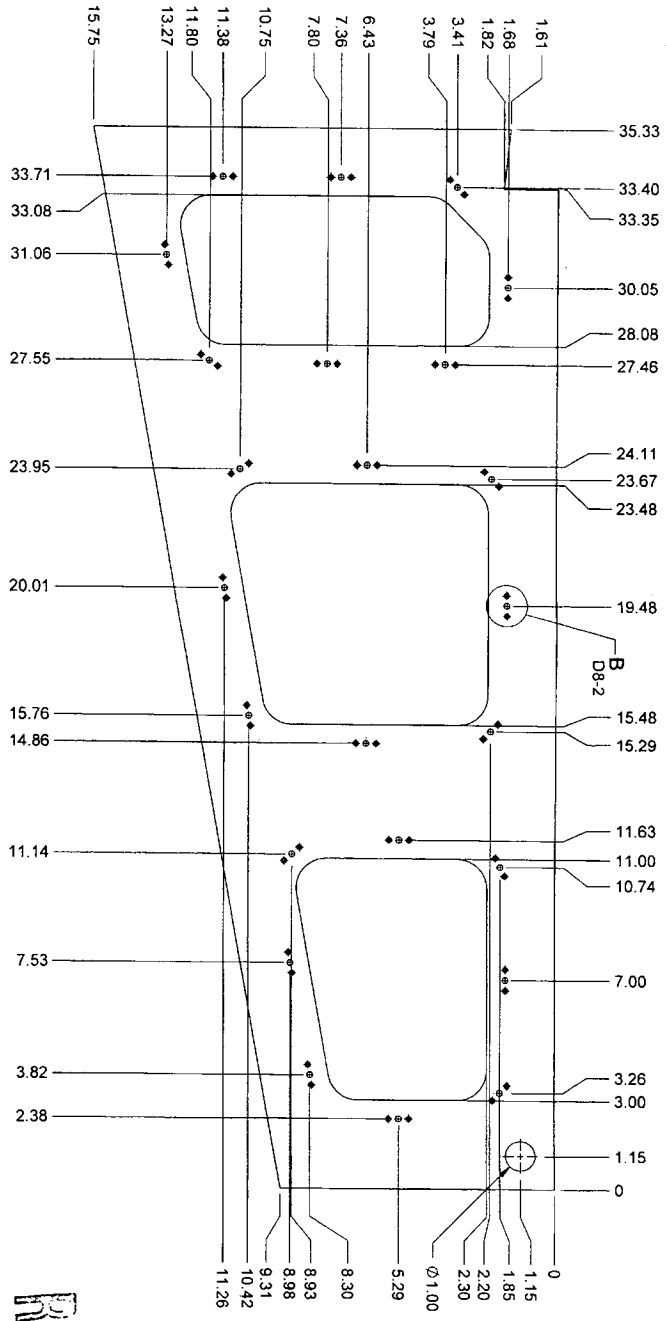
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



0.063
REF



D4463-1 TANK TOP

- NOTES:**
- 1) MATERIAL: 6061-T6/762 ALUMINUM SHEET, 0.063 THICK
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS 4027 OR ASTM B209
REF DART SPEC M8061T6S.063
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 006 4.1
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 1.70 lbs

DESIGN	D4463	DART AEROSPACE LTD
DRAWN	BC	HAWKESBURY, ONTARIO, CANADA
CHECKED	BC	
MFG. APPR.	BC	
APPROVED	BC	
DE APPR.	BC	
DATE	12.03.23	
TITLE	TANK	
SCALE	NTS	
REV. C	SHEET 2 OF 14	

RELEASED
2012-04-24

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 83809
Description: TANK Top ASSEMBLY		Part Number: D4463-041
Inspection Dwg: D4463-1	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☒ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø 1.098	+ .004 - .001	0.100	✓		Vern	HB-02
Ø 1.206	+ .005 - .001	0.208	✓		Vern	HB-02
Ø 1.00	+ .012 - .001	0.999	✓		Vern	HB-02
1.15	1/2 .030	1.162	✓		Vern	HB-02
1.85	1/2 .030	1.856	✓		Vern	HB-02
2.26	1/2 .030	2.201	✓		Vern	HB-02
2.36	1/2 .030	2.315	✓		Vern	HB-02
5.29	1/2 .030	5.299	✓		Vern	HB-02
8.35	1/2 .030	8.317	✓		Vern	HB-02 Prod-W-J-02
8.93	1/2 .030	8.934	✓		Vern	HB-02 "
8.98	1/2 .030	8.989	✓		Vern	HB-02 "
9.31	1/2 .030	9.314	✓		Vern	HB-02 "
10.42	1/2 .030	10.418	✓		Vern	Prod-W-J-02
11.25	1/2 .030	11.253	✓		Vern	Prod-W-J-02
1.61	1/2 .030	1.614	✓		Vern	HB-02
1.68	1/2 .030	1.68	✓		Vern	HB-02
1.85	1/2 .030	1.827	✓		Vern	HB-02
3.41	1/2 .030	3.416	✓		Vern	HB-02
3.79	1/2 .030	3.794	✓		Vern	HB-02
6.43	1/2 .030	6.433	✓		Vern	HB-02
7.36	1/2 .030	7.374	✓		Vern	HB-02
7.86	1/2 .030	7.806	✓		Vern	HB-02
10.75	1/2 .030	10.749	✓		Vern	HB-02

Measured by: SM
Date: 12-5-1

Audited by: 8
Date: 7/6/03

Prototype Approval:
Date:


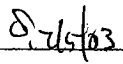
Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

DART AEROSPACE LTD		Work Order: 83929
Description: TANK Top ASSEMBLY		Part Number: D4463-041
Inspection Dwg: D4463-1 Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☒ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
11.38 TL	.030	11.382	✓		Vern	H1B-02
11.80 TL	.030	11.808	✓		Vern	H1B-02
13.27 TL	.030	13.27	✓		MT	H1B-01
1.15 TL	.030	1.153	✓		Vern	H1B-02
3.00 TL	.030	3.011	✓		Vern	H1B-02
3.26 TL	.030	3.265	✓		Vern	H1B-02
7.00 TL	.030	7.008	✓		Vern	H1B-02
10.74 TL	.030	10.758	✓		Vern	H1B-02 Prod-W-3-02
11.00 TL	.030	11.009	✓		Vern	H1B Prod-W-3-02
11.63 TL	.030	11.635	✓		Vern	Prod-W-3-02
15.29 TL	.030	15.29	✓		MT	H1B-01
15.48 TL	.030	15.48	✓		MT	H1B-01
19.48 TL	.030	19.48	✓		MT	H1B-01
23.48 TL	.030	23.48	✓		MT	H1B-01
23.67 TL	.030	23.67	✓		MT	H1B-01
24.11 TL	.030	24.11	✓		MT	H1B-01
27.46 TL	.030	27.46	✓		MT	H1B-01
28.08 TL	.030	28.08	✓		MT	H1B-01
30.05 TL	.030	30.05	✓		MT	H1B-01
33.34 TL	.030	33.35	✓		MT	H1B-01
33.46 TL	.030	33.40	✓		MT	H1B-01
35.33 TL	.030	35.33	✓		MT	H1B-01

Measured by: 	Audited by: 	Prototype Approval:
Date: 12-5-1	Date:	Date:

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

DART AEROSPACE LTD

Work Order: 93829

Description: TANK TOP ASSEMBLY

Part Number: D4463-041

Inspection Dwg: D4463-1, Rev: C

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FIRST ARTICLE INSPECTION CHECKLIST


☒

First Article


☒

Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
2.38 $\frac{1}{2}$	30	2.382	✓		Vern	H/B-02
3.82 $\frac{1}{2}$	30	3.832	✓		Vern	H/B-02
7.53 $\frac{1}{2}$	30	7.545	✓		Vern	H/B-02
11.14 $\frac{1}{2}$	30	11.155	✓		Vern	H/B-02
14.86 $\frac{1}{2}$	30	14.86	✓		MT	H/B-01
15.76 $\frac{1}{2}$	30	15.76	✓		MT	H/B-01
20.01 $\frac{1}{2}$	30	20.01	✓		MT	H/B-01
23.95 $\frac{1}{2}$	30	23.95	✓		MT	H/B-01
27.55 $\frac{1}{2}$	30	27.55	✓		MT	H/B-01
31.06 $\frac{1}{2}$	30	31.06	✓		MT	H/B-01
33.08 $\frac{1}{2}$	30	33.08	✓		MT	H/B-01
33.71 $\frac{1}{2}$	30	33.71	✓		MT	H/B-01
.062 $\frac{1}{2}$.010	0.062	✓		Vern	H/B-02

Measured by:  J.M.

Date: 12-5-1

Audited by:  J.

Date: 12/5/03

Prototype Approval:

Date:

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

